

What is Claimed is:

1. A cap for a container mouth comprising in combination:
a transversely extending platform portion having upper and lower
opposed faces and having a depression relative to said upper face defined therein that
5 extends generally across said platform portion, said depression having a pair of
laterally spaced, generally opposed side walls and a bottom wall extending between
said side walls;

a generally cylindrical, peripheral flange portion extending downwardly
from said lower face, said flange portion defining circumferential surface portions
10 whereby said flange portion is engageable with peripheral portions of said container
mouth;

a closure plate having top and bottom surface portions, proximal and
distal opposite end portions, and a pair of laterally spaced, opposed lateral wall
portions, said closure plate being generally receivable within and between said
15 depression side walls with each of said lateral wall portions being adjacent to a
different one of said side walls, said proximal end portion having first hinge means
that pivotably associates said closure plate with said platform portion, whereby said
closure plate is pivotable relative to said depression;

said depression having an aperture defined therethrough that is located
20 in spaced, adjacent, radially interior relationship relative to said flange, and said
bottom surface portions having an outstanding stopper means associated therewith, the
interrelationship between said aperture and said stopper means being such that, when
said closure plate is pivoted so that said bottom surface portions are adjacent said
depression, said stopper means closes said aperture; and

25 a pull ring pivotally connected to said distal end portion, including
associated hinge means, whereby, when said pull ring is finger engaged, said closure
plate is pivoted upwardly away from said depression and said stop means is separated
from said aperture.

30 2. The cap of claim 1 wherein a relatively small pressure
equalizing vent hole is additionally defined in said depression in radially inwardly
spaced relationship relative to said aperture, and said bottom surface portions

additionally have an outstanding plug means associated therewith for closing said vent hole.

5 3. The cap of claim 2 wherein the interrelationship between said pressure equalizing hole and said plug means being such that, when said closure plate is pivoted so that said bottom surface portions are adjacent said depression, said plug means closes said pressure equalizing hole.

10 4. The cap of claim 3 wherein said stopper means has a depth substantially greater than the depth of said plug means whereby, when said pull ring is engaged by a finger, and said closure plate is pivoted upwardly away from said depression, said plug means is separated from said pressure equalizing hole before said stop means is separated from said aperture.

15 5. The cap of claim 1 wherein pull ring includes stop means limiting maximum pivotal movement of said pull ring relative to said closure plate.

20 6. The cap of claim 1 wherein each of said lateral wall portions has a raised protuberance that is adapted to frictionally and slidably engage an adjacent portion of each of said side walls when said closure plate is pivoted so that, when said closure plate is pivoted so that said bottom surface portions are adjacent said depression, said protuberances retard removal of said stopper means from said aperture.

25 7. The cap of claim 1 wherein said first hinge means comprises a pair of pin means each of which is associated with a different one of said lateral wall portions at said proximal end and also with an adjacent opposed portion of each of said side walls whereby said closure plate is pivotable relative to said depression.

30 8. The cap of claim 7 wherein the location where said pin members so associate with said side walls is such that, when said closure plate is pivoted about 180° from the location where said bottom surface portions are adjacent

said depression and said stopper means closes said aperture, said distal end portions extend beyond said platform portion.

5 9. The cap of claim 7 wherein, after said 180° pivot, portions of said pull ring are located between said depression and said top surface portions.

 10. The cap of claim 7 wherein, after said 180° pivot, portions of said pull ring extend downwardly from said closure plate outside of said platform portion.

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 11. The cap of claim 1 wherein said second hinge means comprises a pair of pin means each of which is associated with a different one of said lateral wall portions at said distal end and also with an adjacent defined portion of said closure plate.

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 12. The cap of claim 11 wherein said pull ring includes a pair of rearwardly extending leg members each one of which is associated with one of said pin means whereby each said leg member is pivotably connected with a different opposite side of said distal end portion.

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 13. The cap of claim 12 wherein said upper surface portions have surface contours defined therein that are adapted to nestably receive portions of said pull ring but that leave an apex portion of said pull ring readily accessible for engagement with a finger.

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 14. The cap of claim 12 wherein said pull ring is additionally associated with spring means biasing said pull ring into a flattened position adjacent to said top surface portions.

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 15. The cap of claim 12 wherein a terminal portion of each said leg member is configured so that, when said pull ring is pivoted and elevated relative to said closure plate at an angle of about 90°, each said terminal portion engages an

adjacent portion of said closure plate and thereby limits further movement of said pull ring.

5 16. The cap of claim 12 wherein said pull ring comprised of a
thyroidal configured body having an apex region and a generally opposed foot region
from which a pair of circumferentially spaced legs extend in spaced, parallel
relationship relative to each other, and the spacing between said legs is such that a
portion of said closure plate at said distal end thereof fits therebetween, and each of
said pin means extends between and associates with a different one of said foot regions
10 and an adjacent opposed portion of each of said side walls at said distal end whereby
said pull ring is pivotable relative to said closure plate.

15 17. The cap of claim 16 wherein at least one of said spaced legs is
associated with spring means for yieldingly biasing said pull ring into a flattened
association with said closure plate.

20 18. The cap of claim 16 wherein portions of said closure plate that
are located adjacent to portions of said pull ring are depressed and adapted to nestably
receive said pull ring portions.

25 19. The cap of claim 16 where portions of said closure plate located
adjacent to an apex region of said pull ring are depressed and adapted to receive a
finger that is inserted under said apex region.

30 20. A reusable container cap for a container mouth comprising in
combination:

a unitarily formed base comprising a transversely extending platform
portion having a top surface, peripheral, upstanding side wall portions about said
platform portion, and peripheral downturned, circumferentially extending, threaded
side wall portions about said platform portion,

said platform portion being inclined relative to said side wall portions,
thereby defining well between said top surface and an adjacent region of said

upstanding side wall portions, said platform portion also having a depression defined in said top surface that extends generally transversely thereacross from said well;

5 said depression having a bottom and opposed side walls, an aperture defined therein radially interiorly adjacent said downturned side wall portions and a vent defined therein in radially inwardly spaced relationship relative to said aperture;

 a closure plate having upper and lower opposed surface portions, proximal and distal opposite end portions, and opposite lateral side portions which each fits in said depression adjacent a different one of said opposed side walls, said proximal end portions being associated with first hinge means enabling pivotal
10 movements of said closure plate in said depression, and said lower surface portions having first and second stopper means positioned and adapted to close said aperture and said vent, respectively, when said lower surface portions are adjacent said bottom; and

 a pull ring pivotally associated by second hinge means to said distal end
15 portions and having spring means yieldingly biasing said pull ring into a flattened association with said upper surface portions and stop means limiting the maximum angle of pivotal opening of said pull ring relative to said closure plate;

 said upper surface portions including depressed portions adapted to nestably receive adjacent portions of said pull ring and to permit access of a finger
20 adjacent said pull ring;

whereby elevating said pull ring by said finger relative to said upper surface separates said lower surface portions from said bottom and opens said aperture and said vent.